



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/813,966

03/31/2004

Melton Sherwood Thoele

2881

7590

09/20/2006

James W. Hiney, Esq.
Suite 1100
1872 Pratt Drive
Blacksburg, VA 24060

EXAMINER

KUMAR, PREETI

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/813,966	Applicant(s) THOELE, MELTON SHERWOOD	
	Examiner Preeti Kumar	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) 15-81 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-14 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/31/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Non-Final Rejection

1. Applicant's election with traverse of group I, claims 1-14 in the reply filed on 07/18/2006 is acknowledged. The traversal is on the ground(s) that the claims of groups I-VI can easily be searched. Applicants arguments on pages 2-5 of the reply filed 7/18, 2006 have been fully considered by not found persuasive because examining three different compositions consisting of "slightly different components" and their respective methods within one application is undue burden on the examiner irrespective of how slight the differences in components and modes of operation. The search required for Group I encompasses a composition consisting of water, sodium formate, sodium tripolyphosphate, sodium xylene sulfonate, protease and amylase, which search cannot be the same as the search required for Group II drawn to a composition comprising a solvent, enzyme stabilizer, buffer, carbonates, sulfides, hydrotropic nonionic surfactant and compounds to remove protein and carbohydrate materials and also cannot the same as the search required for Group V drawn to a composition comprising water, sodium formate, sodium tripolyphosphate, sodium xylene sulfonate, protease, amylase, and a nonionic surfactant. The three compositions are unrelated and have different components modes of operation, functions and effects and thus examination of the various methods and components within one application is undue burden on the examiner.
2. The requirement is still deemed proper and is therefore made FINAL.

Art Unit: 1751

3. Claims 15-81 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 17, 2006.
4. Claims 1-14 are pending.

Claim Objections

5. Claim 1 is objected to because of the following informalities: Claim 1 recites "...consists the..." and should recite "consists of the" for proper grammatical sentence construction purposes. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 1, 8, 10, 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites an enzymatic cleanser for cleaning of medical equipment and instruments which have bio-residue thereon, said cleanser **comprising** a composition which **consists** the following components, water, sodium formate, sodium tripolyphosphate, sodium xylene sulfonate, protease enzyme, and amylase enzyme. Examiner does not know if the Applicants are claiming a composition **consisting of** water, sodium formate, sodium tripolyphosphate, sodium xylene sulfonate, protease enzyme, and amylase enzyme OR a composition **comprising** water, sodium formate,

Art Unit: 1751

sodium tripolyphosphate, sodium xylene sulfonate, protease enzyme, and amylase enzyme.

Claims 8, 10, 12 and 14 recite the limitation "also comprising..." or "and including..." in claim 1. This is indefinite since the claim 1 recites the closed language a composition which consists of the following components, water, sodium formate, sodium tripolyphosphate, sodium xylene sulfonate, protease enzyme, and amylase enzyme.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-9 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Potgieter et al. (H 1,818).

Potgieter et al. illustrate enzymatic heavy duty laundry detergent compositions in example 2 and example 11 comprising 0.35 or 0.4 % wt. protease and/or amylase enzyme and further provide motivation to modify the amount of enzyme in col.5,ln.10-15, specifically where they teach that typical detergent or cleaning compositions can have from about 0.0001% to about 5% of deterative enzyme selected from the group consisting of proteases, amylases, lipases, cellulases, pullulanases, keratinases, and mixtures thereof.

Potgieter et al. illustrate in example 2 that the enzymatic heavy duty laundry detergent composition comprises 1.2% wt. sodium formate stabilizer, 0.2% wt calcium chloride, 0.3% wt. fragrance and 53.88% wt. water.

Potgieter et al. illustrate in example 2 that the enzymatic heavy duty laundry detergent composition comprises 3% wt. sodium xylene sulphonate surfactant and further provide motivation to modify the amount of surfactant from about 1% to about 30% of a deterative surfactant in general. See col.3,ln.19 and col.5,ln.9.

Potgieter et al. illustrate in example 11 that the enzymatic heavy duty laundry detergent composition comprises 15% wt. sodium tripolyphosphate builder and further provide motivation to modify the amount of builder from about 0.1% to about 80% of a builder in general. See col.5,ln.10-11.

Accordingly the teachings of Potgieter et al. anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Potgieter et al. are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art, to arrive at an enzymatic cleanser for cleaning of medical equipment and instruments which have bio-residue thereon comprising a composition which consists of the claimed components in the claimed percentage because Potgieter et al. teach a detergent composition comprising the claimed components and further provide motivation to one of ordinary skill in the art to modify the amounts of the claimed components to achieve optimal cleaning efficiency.

12. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potgieter et al. (H 1,818) as applied to claims 1-9 and 14 above, and further in view of Desai (US 5,451,342).

Potgieter et al. are relied upon as set forth above. However, Potgieter et al. do not specifically teach a cleanser comprising 9-11% wt. alkoxylated isopropanolamide wetting agent as recited by the instant claims 10-11.

Desai teaches clear liquid detergent compositions comprising 1 to 20 % of a suds stabilizer selected from at least one mono- or di-ethanolamide or isopropanolamide of a C.sub.10 -C.sub.18 straight or branched chain saturated fatty acid. See col.1,ln.40-45. Desai teaches that the detergent composition comprising at least one sodium, potassium or ammonium salt of a straight or branched chain C.sub.10 -C.sub.18 alkylethoxy (1-3EO) sulfate; at least one mono- or di-ethanolamide or isopropanolamide of a C.sub.10 -C.sub.18 straight or branched chain saturated fatty acid; and in the presence of 0.5 to 15% of viscosity lowering agents such as sodium xylene sulfonate in

Art Unit: 1751

order to maintain the required liquid form; said detergent composition possess a number of advantages in addition to being clear and waterwhite, they possess excellent deterative activity at in-use concentrations against a wide range of food and other contaminants. They are completely biodegradable, economical, and have excellent skin compatibility at the in-use concentrations. Furthermore, they produce desirable levels of stable foam. See col.2,ln.40-50.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the teachings of Potgieter et al. with 9-11% wt. alkoxyated isopropanolamide wetting agent as recited by the instant claims 10-11, with a reasonable expectation of success and similar results, because Desai provide motivation to supplement liquid detergent compositions with 1 to 20 wt.% isopropanolamide to provide excellent deterative activity at in-use concentrations against a wide range of food and other contaminants.

13. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potgieter et al. (H 1,818) as applied to claims 1-9 and 14 above, and further in view of Cala et al. (US 6,239,089).

Potgieter et al. are relied upon as set forth above. However, Potgieter et al. do not specifically teach a cleanser comprising 0.5 to 1.5% wt. of a sodium alkane sulfonate/sodium capryl mixture as recited by the instant claims 12-13.

Cala et al. teach the benefit of 3.0 to 25 wt.% sodium alkane sulfonate hydrotropes, preferably sodium capryl sulfonate (37.8% actives), in detergent compositions for their known biodegradable anionic surfactant properties with excellent

Art Unit: 1751

coupling properties. Specifically Cala et al. teach that the inclusion of the sodium capryl sulfonate enhances the wetting and emulsifying characteristics of the final solution and permits maximum penetration thereof within articles that are difficult to clean. See col.6,ln.15-30.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the teachings of Potgieter et al. with 0.5 to 1.5% wt. of a sodium alkane sulfonate/sodium capryl mixture as recited by the instant claims 12-13, with a reasonable expectation of success and similar results, because Cala et al. provide motivation to supplement liquid detergent compositions with 3.0 to 25 wt.% sodium alkane sulfonate hydrotropes, preferably sodium capryl sulfonate (37.8% actives) to enhance the wetting and emulsifying characteristics of the final solution and permit maximum penetration thereof within articles that are difficult to clean. See col.6,ln.15-30.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone

Art Unit: 1751

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Preeti Kumar P.K.
Examiner
Art Unit 1751

PK

Douglas
DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER
1751